

SEQUENCE LISTING

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POLTORAK, ALEXANDER

<120> LPS - RESPONSE GENE COMPOSITIONS AND METHODS

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<170> PatentIn Ver. 2.0

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His Asn Asn Phe Phe Ser Leu Asp Thr Phe Pro Tyr Lys Cys Leu Asn
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Ile Ile Gly Val Ser Val Leu Ser Val Leu Val Val Ser Val Val Ala
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Ile Lys Tyr Gly Arg Gly Glu Asn Ile Tyr Asp Ala Phe Val Ile Tyr
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Ser Ser Gln Asp Glu Asp Trp Val Arg Asn Glu Leu Val Lys Asn Leu
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Glu Glu Gly Val Pro Pro Phe Gln Leu Cys Leu His Tyr Arg Asp Phe
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Ile Pro Gly Val Ala Ile Ala Ala Asn Ile Ile His Glu Gly Phe His
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Lys Ser Arg Lys Val Ile Val Val Ser Gln His Phe Ile Gln Ser
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Arg Trp Cys Ile Phe Glu Tyr Glu Ile Ala Gln Thr Trp Gln Phe Leu
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Ser Ser Arg Ala Gly Ile Ile Phe Ile Val Leu Gln Lys Val Glu Lys
725 730 735

Thr Leu Leu Arg Gln Gln Val Glu Leu Tyr Arg Leu Leu Ser Arg Asn
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Thr Tyr Leu Glu Trp Glu Asp Ser Val Leu Gly Arg His Ile Phe Trp
755 760 765

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His Asp Ile Pro Tyr Ser Thr Lys Asn Leu Asp Leu Ser Phe Asn Pro
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Leu Lys Ile Leu Arg Ser Tyr Ser Phe Thr Asn Phe Ser Gln Leu Gln
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Trp Leu Asp Leu Ser Arg Cys Glu Ile Glu Thr Ile Glu Asp Lys Ala
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Trp His Gly Leu Asn Gln Leu Ser Thr Leu Val Leu Thr Gly Asn Pro
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Glu His Val Asp Leu Ser Tyr Asn Tyr Ile Gln Thr Ile Ser Val Lys
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Asp Leu Gln Phe Leu Arg Glu Asn Pro Gln Val Asn Leu Ser Leu Asp
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35 40 45

Pro Asp Asn Leu Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe Asn
50 55 60

Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu Leu
65 70 75 80

Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp Gly
85 90 95

Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly Asn
100 105 110

Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser Leu
115 120 125

Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn Phe
130 135 140

Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His Asn
145 150 155 160

Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr Asn
165 170 175

Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Ser Ile Tyr Cys
180 185 190

Thr Asp Leu Arg Val Leu His Gln Met Pro Leu Leu Asn Leu Ser Leu
195 200 205

Asp Leu Ser Leu Asn Pro Met Asn Phe Ile Gln Pro Gly Ala Phe Lys
210 215 220

Glu Ile Arg Leu His Lys Leu Thr Leu Arg Asn Asn Phe Asp Ser Leu
225 230 235 240

Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val His
245 250 255

Arg Leu Val Leu Gly Glu Phe Arg Asn Glu Gly Asn Leu Glu Lys Phe
260 265 270

Asp Lys Ser Ala Leu Glu Gly Leu Cys Asn Leu Thr Ile Glu Glu Phe
275 280 285

Arg Leu Ala Tyr Leu Asp Tyr Tyr Leu Asp Asp Ile Ile Asp Leu Phe
290 295 300

Asn Cys Leu Thr Asn Val Ser Ser Phe Ser Leu Val Ser Val Thr Ile
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 Glu Arg Val Lys Asp Phe Ser Tyr Asn Phe Gly Trp Gln His Leu Glu
 325 330 335
 Leu Val Asn Cys Lys Phe Gly Gln Phe Pro Thr Leu Lys Leu Lys Ser
 340 345 350
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 355 360 365
 Glu Val Asp Leu Pro Ser Leu Glu Phe Leu Asp Leu Ser Arg Asn Gly
 370 375 380
 Leu Ser Phe Lys Gly Cys Cys Ser Gln Ser Asp Phe Gly Thr Thr Ser
 385 390 395 400
 Leu Lys Tyr Leu Asp Leu Ser Phe Asn Gly Val Ile Thr Met Ser Ser
 405 410 415
 Asn Phe Leu Gly Leu Glu Gln Leu Glu His Leu Asp Phe Gln His Ser
 420 425 430
 Asn Leu Lys Gln Met Ser Glu Phe Ser Val Phe Leu Ser Leu Arg Asn
 435 440 445
 Leu Ile Tyr Leu Asp Ile Ser His Thr His Thr Arg Val Ala Phe Asn
 450 455 460
 Gly Ile Phe Asn Gly Leu Ser Ser Leu Glu Val Leu Lys Met Ala Gly
 465 470 475 480
 Asn Ser Phe Gln Glu Asn Phe Leu Pro Asp Ile Phe Thr Glu Leu Arg
 485 490 495
 Asn Leu Thr Phe Leu Asp Leu Ser Gln Cys Gln Leu Glu Gln Leu Ser
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 Pro Thr Ala Phe Asn Ser Leu Ser Ser Leu Gln Val Leu Asn Met Ser
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 His Asn Asn Phe Phe Ser Leu Asp Thr Phe Pro Tyr Lys Cys Leu Asn
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 Ser Leu Gln Val Leu Asp Tyr Ser Leu Asn His Ile Met Thr Ser Lys
 545 550 555 560
 Lys Gln Glu Leu Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn Leu
 565 570 575
 Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Gln Ser Phe Leu Gln
 580 585 590
 Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Val Glu Arg Met Glu
 595 600 605

Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Leu Asn
610 615 620

Ile Thr Cys Gln Met Asn Lys Thr Ile Ile Gly Val Ser Val Leu Ser
625 630 635 640

Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr Phe
645 650 655

His Leu Met Leu Leu Ala Gly Cys Ile Lys Tyr Gly Arg Gly Glu Asn
660 665 670

Ile Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp Val
675 680 685

Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe Gln
690 695 700

Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala Ala
705 710 715 720

Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val Val
725 730 735

Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr Glu
740 745 750

Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile Phe
755 760 765

Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Gln Gln Val Glu
770 775 780

Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp Ser
785 790 795 800

Val Leu Gly Arg His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu Leu
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Trp Gln Glu Ala Thr Ser Ile
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Pro Asn Ile Thr Tyr Gln Cys Met Asp Gln Lys Leu Ser Lys Val Pro
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Asp Asp Ile Pro Ser Ser Thr Lys Asn Ile Asp Leu Ser Phe Asn Pro
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Leu Lys Ile Leu Lys Ser Tyr Ser Phe Ser Asn Phe Ser Glu Leu Gln
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Trp Leu Asp Leu Ser Arg Cys Glu Ile Glu Thr Ile Glu Asp Lys Ala
85 90 95

Trp His Gly Leu His His Leu Ser Asn Leu Ile Leu Thr Gly Asn Pro
100 105 110

Ile Gln Ser Phe Ser Pro Gly Ser Phe Ser Gly Leu Thr Ser Leu Glu
115 120 125

Asn Leu Val Ala Val Glu Thr Lys Leu Ala Ser Leu Glu Ser Phe Pro
130 135 140

Ile Gly Gln Leu Ile Thr Leu Lys Lys Leu Asn Val Ala His Asn Phe
145 150 155 160

Ile His Ser Cys Lys Leu Pro Ala Tyr Phe Ser Asn Leu Thr Asn Leu
165 170 175

Val His Val Asp Leu Ser Tyr Asn Tyr Ile Gln Thr Ile Thr Val Asn
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Asp Leu Gln Phe Leu Arg Glu Asn Pro Gln Val Asn Leu Ser Leu Asp
195 200 205

Met Ser Leu Asn Pro Ile Asp Phe Ile Gln Asp Gln Ala Phe Gln Gly
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Ile Lys Leu His Glu Leu Thr Leu Arg Gly Asn Phe Asn Ser Ser Asn
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Ile Met Lys Thr Cys Leu Gln Asn Leu Ala Gly Leu His Val His Arg
245 250 255

Leu Ile Leu Gly Glu Phe Lys Asp Glu Arg Asn Leu Glu Ile Phe Glu
260 265 270

Pro Ser Ile Met Glu Gly Leu Cys Asp Val Thr Ile Asp Glu Phe Arg
275 280 285

Leu Thr Tyr Thr Asn Asp Phe Ser Asp Asp Ile Val Lys Phe His Cys
290 295 300

Leu Ala Asn Val Ser Ala Met Ser Leu Ala Gly Val Ser Ile Lys Tyr
305 310 315 320

Leu Glu Asp Val Pro Lys His Phe Lys Trp Gln Ser Leu Ser Ile Ile
325 330 335

Arg Cys Gln Leu Lys Gln Phe Pro Thr Leu Asp Leu Pro Phe Leu Lys
340 345 350

Ser Leu Thr Leu Thr Met Asn Lys Gly Ser Ile Ser Phe Lys Lys Val
355 360 365

Ala Leu Pro Ser Leu Ser Tyr Leu Asp Leu Ser Arg Asn Ala Leu Ser
370 375 380

Phe Ser Gly Cys Cys Ser Tyr Ser Asp Leu Gly Thr Asn Ser Leu Arg
385 390 395 400

His Leu Asp Leu Ser Phe Asn Gly Ala Ile Ile Met Ser Ala Asn Phe
405 410 415

Met Gly Leu Glu Glu Leu Gln His Leu Asp Phe Gln His Ser Thr Leu
420 425 430

Lys Arg Val Thr Glu Phe Ser Ala Phe Leu Ser Leu Glu Lys Leu Leu
435 440 445

Tyr Leu Asp Ile Ser Tyr Thr Asn Thr Lys Ile Asp Phe Asp Gly Ile
450 455 460

Phe Leu Gly Leu Thr Ser Leu Asn Thr Leu Lys Met Ala Gly Asn Ser
465 470 475 480

Phe Lys Asp Asn Thr Leu Ser Asn Val Phe Ala Asn Thr Thr Asn Leu
485 490 495

Thr Phe Leu Asp Leu Ser Lys Cys Gln Leu Glu Gln Ile Ser Trp Gly
500 505 510

Val Phe Asp Thr Leu His Arg Leu Gln Leu Leu Asn Met Ser His Asn
515 520 525

Asn Leu Leu Phe Leu Asp Ser Ser His Tyr Asn Gln Leu Tyr Ser Leu
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Ser Thr Leu Asp Cys Ser Phe Asn Arg Ile Glu Thr Ser Lys Gly Ile
545 550 555 560

Leu Gln His Phe Pro Lys Ser Leu Ala Phe Phe Asn Leu Thr Asn Asn
565 570 575

Ser Val Ala Cys Ile Cys Glu His Gln Lys Phe Leu Gln Trp Val Lys
580 585 590

Glu Gln Lys Gln Phe Leu Val Asn Val Glu Gln Met Thr Cys Ala Thr
595 600 605

Pro Val Glu Met Asn Thr Ser Leu Val Leu Asp Phe Asn Asn Ser Thr
610 615 620

Cys Tyr Met Tyr Lys Thr Ile Ile Ser Val Ser Val Val Ser Val Ile
625 630 635 640

Val Val Ser Thr Val Ala Phe Leu Ile Tyr His Phe Tyr Phe His Leu
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Ile Leu Ile Ala Gly Cys Lys Lys Tyr Ser Arg Gly Glu Ser Ile Tyr
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Asp Ala Phe Val Ile Tyr Ser Ser Gln Asn Glu Asp Trp Val Arg Asn
675 680 685

Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Arg Phe His Leu Cys
690 695 700

Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala Ala Asn Ile
705 710 715 720

Ile Gln Glu Gly Phe His Lys Ser Arg Lys Val Ile Val Val Val Ser
725 730 735

Arg His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr Glu Ile Ala
740 745 750

Gln Thr Trp Gln Phe Leu Ser Ser Arg Ser Gly Ile Ile Phe Ile Val
755 760 765

Leu Glu Lys Val Glu Lys Ser Leu Leu Arg Gln Gln Val Glu Leu Tyr
770 775 780

Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp Asn Pro Leu
785 790 795 800

Gly Arg His Ile Phe Trp Arg Arg Leu Lys Asn Ala Leu Leu Asp Gly
805 810 815

Lys Ala Ser Asn Pro Glu Gln Thr Ala Glu Glu Glu Gln Glu Thr Ala
820 825 830

Thr Trp Thr
835